MCHENRY COUNTY TUBERCULOSIS CARE AND TREATMENT BOARD MEETING 2200 N. SEMINARY AVE. BUILDING A WOODSTOCK, ILLINOIS 60098

May 22, 2019 10:30 AM

AGENDA

- 1. Call to Order
- 2. Public Participation
- 3. Minutes of January 2019 Meeting
- 4. Consent Agenda
 - A) Disbursements; November December 2018, January-February 2019, March-April 2019
 - B) Income and Expense Report; November December 2018, January-February 2019, March-April 2019
- 5. Contracts, Agreements, and/or Addendums
- 6. Monthly Reports
 - A) Coordinators Report
 - i. Staff Update
 - ii. TB Nurse Report
 - B) Statistics
 - C) IDPH Report
 - D) TB Profile Report
- 7. Program Highlights
- 8. Old Business
 - A) Reconstruction Update (Administration move 3/18)
- 9. New Business
- 10. Board Issues
- 11. Information and Communication
- 12. Executive Session
- 13. Adjournment

MINUTES AND CONSENT AGENDA

MCHENRY COUNTY TUBERCULOSIS AND TREATMENT BOARD

MEETING MINUTES

JANUARY 15, 2019

CALL TO ORDER:

Rebecca Rockwood M.T. called the meeting to order at 8:00am; TB Board Members present were: James Mowery M.D, Rebecca Rockwood M.T, and Fran Stanwood R.N; Staff present were: Melissa H. Adamson MPH Administrator, Susan Karras MBA, BSN, RN Director of Nursing, Jennifer Schorsch BS, RN, NE-BC, Assistant Director of Nursing, Ryan Sachs Epidemiologist, and Danielle Burck BSN, RN.

MINUTES:

James Mowery M.D made motion to approve TB Board Minutes from December 2018; second by Fran Stanwood, RN.

FINANCIAL STATUS:

Susan Karras explained that November/December 2018 Disbursements and Income and Expense Report were not available due to new county fiscal system.

Rebecca Rockwood made motion to approve Consent Agenda; second by Fran Stanwood.

Susan Karras discussed new contract with AICURE (Video DOT). Dr. Mowery made motion to approve; second by Fran Stanwood.

MONTHLY REPORTS:

Danielle reviewed TB Nurse Report for December 2018.

Skin Testing:

In December 19 clinics were held with 32 skin tests performed. 1 IGRA collected.

Doctor Clinic:

There was no clinic with Dr. Hafiz this month, it was rescheduled for January 2019.

Patient Update:

Patient A: in continuation phase of TB therapy. Therapy is to be extended by 3 months due to indeterminate results on drug susceptibility for PZA.

Patient B: in continuation phase of TB therapy, completing case for the state of Texas. To be completing in February 2019.

Activities:

12/11/2018 & 12/14/2018 5 clients were tested at PADS center

Webinars/Trainings:

- TB 101 December 5th and 6th
- December 13th Illinois Tuberculosis Control Authority Meeting
- Ongoing Case Management Course through Southeastern National Tuberculosis Center

Upcoming Events

- Annual Testing for our employees
- PADS TST testing

OLD BUSINESS:

Melissa H. Adamson and Susan Karras discussed the move in the near future to Administration Building and where employees will be located.

NEW BUSINESS:

Melissa H. Adamson discussed new grant to create a data sharing system to plan strategically in the future.

BOARD ISSUES: None

INFORMATION:

Tuberculosis of the Finger, Jennifer Mandal, M.D., and Mary Margaretten, M.D., The New England Journal of Medicine, September 20, 2018. N Engl J Med 2018; 379-1161 DOI: 10.1056:NEJMicm1800879

ADJOURNMENT:

Rebecca Rockwood made motion to adjourn meeting at 9:55am; second by James Mowery.

Next Board Meeting is scheduled for March 19, 2019.

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS November 2018 (FY18)~ Preliminary as of 2/13/2019

Personal Service	ACCT#	PAYROLL	
Acevedo, Lola (term 10/26/18) Garcia, Sandra			
(transfer 11/13/18)	3010	\$3,100.35	
Cazares, Maria	3020	\$0.00	FMLA
Kurka, Amanda	3010	\$6,540.81	
Schoen, Faith	3010	\$6,540.81	
Burck, Danielle	3010	\$3,854.49	
	3025	Included in above	
FICA	3105	\$1,532.79	
IMRF	3110	\$1,999.64	
	•	· ·	Oct-18 INS
INSURANCE	3146	\$3,523.51	Nov-18
•	Payroll Total	\$27,092.40	•

<u>VD/INV</u>	VENDOR	ACCT#	<u>A</u>	MOUNT
JE218919	HD Admin Charge - Q4	4001	\$	5,000.00
VD326174	VERIZON WIRELESS	4096	\$	46.29
1221M-112818	ANSERCALL24 LLC	4130	\$	27.78
24-110918	MERCY HEALTH SYSTEMS CORP	4246	\$	992.00
380130	METRO INFECTIOUS DISEASE CONSULTANTS	4246	\$	500.00
VC294414	METRO INFECTIOUS DISEASE CONSULTANTS	4246	\$	500.00
380131	METRO INFECTIOUS DISEASE CONSULTANTS	4246	\$	500.00
T1037513	OXFORD DIAGNOSTIC LABORATORIES	4442	\$	50.91
VD325383	OXFORD DIAGNOSTIC LABORATORIES	4442	\$	152.73
AA959-201811-0A	ACL LABORATORIES	4442	\$	17,41
VC294597	ACL LABORATORIES	4442	\$	7.15
190376	HEALTHCARE WASTE MANAGEMENT INC	4449	\$	100.00
VD326306	BURCK DANIELLE	5040	\$	89.38
VD325393	BURCK DANIELLE	5040	\$	104.10
EXP-000000154	KURKA AMANDA	5040	\$	40.33
VD325391	KURKA AMANDA	5040	\$	147.15
EXP-000000156	PEREZ ANGELICA	5040	\$	45.78
VC294412	BRANDT PHARMACY INC	5085	\$	467.49
VC294413	BRANDT PHARMACY INC	5085	\$	193.52
VD325382	R&S NORTHEAST LLC	5085	\$	0.20
VD325388	R&S NORTHEAST LLC	5085	\$	0.15
VC294596	BRANDT PHARMACY INC	5085	\$	84.65
236462	BRANDT PHARMACY INC	5085	\$	7.11
236596	BRANDT PHARMACY INC	5085	\$	38.12
236658	BRANDT PHARMACY INC	5085	\$	35.08
236974	BRANDT PHARMACY INC	5085	. \$	35.08

Total Expenses \$9,182.41

Grand Total \$36,274.81

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS

November-December 2018 (FY18) ~ Preliminary as of 2/14/2019 SUMMARY

PERSONAL SERVICES:	ACCT#	PAYROLL
Garcia, Sandra	3010	\$ 5,557.09
Cazares, Maria	3020	\$ 1,614.84
Kurka, Amanda	. 3010	\$ 11,127.99
Schoen, Faith	3010	\$ 10,911.99
Burck, Danielle	3010	\$ 6,434.55
	3025	Included in above
FICA	3105	\$ 1,532.79
IMRF	3110	\$ 1,999.64
INSURANCE	3146	\$ 3,523.51
	Subtotal	42,702.40
	·	"TL., F VL. "Y V
DESCRIPTION:	ACCT#	AMOUNT
Contractual Services	4001	5,000:00
Assoc. Dues/Memberships	4005	, 0,000,00
Training	4006	
Subscriptions	4008	
Printing	4055	
Telephone	4096	46.29
Rent	4101	, , , , , , , , , , , , , , , , , , , ,
Maint. Agreements	4130	27.78
Maint Office Equipment	4131	
Medical	4246	2,492.00
Special Consultants	4435	•
Private Lab Services	4442	228.20.
Refuse disposal	4449	100.00
Contingent	4570	
Office Supplies	5010	
Office Equipment	5020	
Postage	5030	
Mileage	5040	426.74
Meeting Expenses	5050	•
Supplies	5070	
Medical Supplies	5080	
Medication	5085	914.02
Fuel, oil, grease	5160	
TOTAL EXPENSES	,	-
	Expense Total	9,235.03
	Grand Totals	\$ 51,937.43

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS Preliminary December 2018 (FY19) as of 3/12/2019

		Personal Service	-	ACCT#	PAYROLL.	
	Garcia, Sandra	-		3010	\$2,456.74	
	Cazares, Maria			3020	\$1,614.84	
	Kurka, Amanda		-	3010	\$4,587.18	•
	Schoen, Faith		_	3010	\$4,371.18	
•	Burck, Danielle			3010	\$2,580.06	
				3025	Included in above	-
•	FICA .	•		3105	\$0.00	Fringe not
, .	IMRF			3110	\$0.00	posted as of
	INSURANCE			3146	\$0.00	2/14/2018
	•			Payroll Total	\$15,610.00	
		-				
VD/Invoice #		VENDOR	٠.	ACCT#	AMOUNT	
236348	BRANDT PHARMA	CY INC		508500	\$52,62	
	,	. •		Total Expenses	\$52.62	•
	• .		•		,	
	•		•	Grand Total	\$15,662.62	

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS Preliminary January 2019 (FY19) ~ as of 3/5/2019

Personal Service	ACCT#	PAYROLL
Garcia, Sandra	3010	\$2,513.70
Cazares, Maria	3020	\$1,845.88
Kurka, Amanda	3010	\$4,374.72
Schoen, Faith	3010	\$4,374.72
Burck, Danielle	3010	\$2,578.02
	3025	Included in above
FICA	3105	\$0.00
IMRF	3110	\$0.00
INSURANCE	3146	\$0.00
	Payroll Total	\$15,687.04

Invoice #	<u>VENDOR</u>	ACCT#	AMOUNT
EXPI-00000244	BURCK DANIELLE	504000	\$39.24
EXPI-00000233	PEREZ ANGELICA	504000	\$73.03
EXPI-00000258	KURKA AMANDA	504000	\$59.41
EXPI-00000200	BURCK DANIELLE	505000	\$79.10
EXPI-00000201	BURCK DANIELLE	505000	\$20.39
EXPI-00000202	BURCK DANIELLE	. 505000	\$6.17.
183574	R&S NORTHEAST LLC	508500	\$0.16
237730	BRANDT PHARMACY INC	508500	\$35.08
237494	BRANDT PHARMACY INC	508500	\$199.40
237163	BRANDT PHARMACY INC	508500	\$114.30
EXPI-00000203	BURCK DANIELLE	516000	\$15.01
•		Expense Total	\$641.29
		Grand Total	\$16,328.33

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS

Preliminary January- Febuary 2019 (FY19)

Preliminary Janua SUMMARY	ry- Febuary 2 ~ as of 3/6/2		(FY19)	
PERSONAL SERVICES:	ACCT#		PAYROLL	
Garcia, Sandra	3010	\$	5,060,71	
Cazares, Maria	3020	\$	3,460.29	
Kurka, Amanda	3010	\$	8,749,44	
Schoen, Faith	3010	\$	8,749.44	
Burck, Danielle	3010	\$	5,283.62	
	3025	•	cluded in above	
FICA	3105	\$	-	
IMRF	3110	\$		
•		•		
INSURANCE	3146	\$	· · · · · · · · · · · · · · · · · · ·	
				Salary & Fringe
			· ·	not posted as of
TOTAL PAYROLL			31,303.50	3/6/2019
DESCRIPTION:	ACCT#		AMOUNT	
Contractual Services	4001	\$		
Assoc. Dues/Memberships	4005	\$	•••	
Training	4006	\$	·	
Subscriptions	4008	\$	· •	•
Printing	4055			•
Telephone	409600	\$	37.90	
Rent	4101	\$		
Maint Agreements	413000	\$	199.00	
Maint Office Equipment	4131	\$	-	•
Medical	424800	\$	868.00	
Special Consultants	4435	\$	**	
Private Lah Services	444140	\$	128 94	

	Grand Total	\$	34.035.11
TOTAL EXPENSES		\$	2,731.61
Fuel, Gas, Oil	516000	\$	15.01
	508500	\$	717.59
Medication			
Medical Supplies	508000	\$	361.53
Supplies	5070	\$. 100.00
Meeting Expenses	505000	\$	105.66
Mileage	504000	\$	247.98
Postage	5030	\$	_
Office Equipment	5020	\$	
Office Supplies	5010	\$	
Refuse disposal	444900	\$	50.00
Private Lab Services	444140	\$	128.94
Special Consultants	4435	\$	
Medical	424800	\$	868.00
Maint Office Equipment	4131	\$	-
Maint Agreements	413000	\$	199.00
Rent	4101	\$	-
Telephone	409600	\$	37.90
Printing	4055		
Oubscriptions	4000	Ψ	-

Grand	Total	\$	34,035.11
		<u> </u>	

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS Preliminary February 2019 (FY19) as of 3/5/2019

Personal Service	ACCT#	PAYROLL
Garcia, Sandra	3010	\$2,547.01
Cazares, Maria	3020	\$1,614.41
Kurka, Amanda	3010	\$4,374.72
Schoen, Faith	3010	\$4,374.72
Burck, Danielle	3010	\$2,705.60
•	3025	Included in above
FICA	3105	\$0.00
IMRF	3110	\$0.00
INSURANCE	3146	\$0.00

Payroll Total \$15,616.46

Invoice #	VENDOR	ACCT#	AMOUNT
OSV000001655567	VERIZON CONNECT NWF INC	409600	\$18.95
OSV000001681779	VERIZON CONNECT NWF INC	409600	\$18.95
341894	STANS OFFICE MACHINES INC	413000	\$199.00
9000100560119	MERCY HEALTH SYSTEMS CORP	424800	\$248.00
9000100561218	MERCY HEALTH SYSTEMS CORP	424800	\$620.00
AA959-201901-0	ACL LABORATORIES	444140	\$27.12
T1105294	OXFORD DIAGNOSTIC LABORATORIES	444140	\$50.91
T1110889	OXFORD DIAGNOSTIC LABORATORIES	444140	\$50.91
194707	HEALTHCARE WASTE MANAGEMENT INC	444900	\$50.00
EXPI-00000366	MONTANA CONNIE	504000	\$63.22
EXPI-00000364	MONTANA CONNIE	504000	\$13.08
44233088	MOORE MEDICAL LLC	508000	\$350.35
44217098	MOORE MEDICAL LLC	508000	\$11.18
24-011419	BRANDT PHARMACY INC	508500	\$52.62
24-012219	BRANDT PHARMACY INC	508500	\$112.66
185226	R&S NORTHEAST LLC	508500	\$10,87
239614	BRANDT PHARMACY INC	508500	\$34.60
239886	BRANDT PHARMACY INC	508500	\$35.08
238548	BRANDT PHARMACY INC	508500	\$98.17
238107	BRANDT PHARMACY INC	508500	\$24.65
		Expense Total	\$2,090.32
•		Grand Total	\$17,706.78

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS ~ as of 5/6/2019 March 2019 (FY19)

Personal Service	ACCT#	PAYROLL
Garcia, Sandra	3010	\$2,547.01
Cazares, Maria	3020	\$820.33
Kurka, Amanda	3010	\$875.92
Schoen, Faith	3010	\$4,374.72
Burck, Danielle	3010	\$2,833.18 Transfer to CD Coordinator 2/4/2019
	3025	Included in above
SS ·	3105	\$710.74
MEDICARE	3106	\$166,22
IMRF ·	3110	\$904.65
INSURANCE	3146	\$0.00
	Payroll Total	\$13.232.77

<u>VD</u>	<u>VENDOR</u>	ACCT#	<u> </u>	MOUNT
OSV000001708233	VERIZON CONNECT NWF INC	409600	\$	18.95
9825329994	VERIZON WIRELESS	409600	\$	86,13
1221M-012319	ANSERCALL 24 LLC	413000	\$	17.82
9000100560219	MERCY HEALTH SYSTEM	424800	\$	186.00
EXPI-00000464	BURCK DANIELLE	504000	\$	29.00
5094634	ABATEMENT TECHNOLOGIES, INC	508000	\$	172.04
3477	WALMART	508500	\$	10.09
2517	WALMART	508500	\$	11.94
1361	WALMART	508500	\$	48.93
3090	WALMART	508500	\$	12.62

Total Expenses \$593.52

Grand Total \$13,826.29

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS March- April 2019 (FY19) as of 5/6/2019 SUMMARY

PERSONAL SERVICES:	ACCT#	F	AYROLL	
Garcia, Sandra	3010	\$	5,094.03	
Cazares, Maria	3020	\$	2,664.22	
Kurka, Amanda	3010	\$	875.92	
Schoen, Faith	3010	\$	8,749.44	
-			•	Transfer to CD
Burck, Danielle	3010	\$		Coordinator 2/4/19
	3025		luded in abov	/e
SS	3105	\$	710.74	
MEDICARE	3106	\$	166.22	
IMRF	3110	\$	904.65	
INSURANCE	3146	\$	4,510.11	
TOTAL PAYROLL		\$	26,508.51	-
DESCRIPTION:	ACCT#		AMOUNT	
Contractual Services	4001			
Assoc. Dues/Memberships	4005			
Training	4006			
Subscriptions	4008			
Printing	4055			
Telephone	4096	\$	105.08	
Rent	4101	*	.00.00	
Maint Agreements	4130	\$	282.82	
Maint Office Equipment	4131	*		
Medical	4248	\$	686.00	
Special Consultants	4435	*	000.00	
Private lab services	444140	\$	137.99	
Refuse disposal	4449	*	.0,,,,,	
Office Supplies	5010			
Office Equipment	5020			
Postage	5030			
Mileage	5040	\$	29.00	
Meeting Expenses	5050	Ψ	20.00	
Supplies	5070			
Medical Supplies	5080	\$	172.04	
Medication	5085	\$	788.92	
TB Test Refund	8090	Ψ	700.02	
TOTAL EXPENSES		\$	2,201.85	-
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	Grand Total	\$	28,710.36	=

MCHENRY COUNTY HEALTH DEPARTMENT TB - DISBURSEMENTS as of 5/6/2019 April 2019 (FY19)

Personal Service	ACCT#	PAYROLL
Garcia, Sandra	3010	\$2,547.02
Cazares, Maria	3020	\$1,843.89
Kurka, Amanda	3010	\$0.00
Schoen, Faith	3010	\$4,374.72
OPEN	3010	\$0.00
	3025	Included in above
SS	3105	\$0.00
MEDICARE	3106	\$0.00
IMRF	3110	\$0.00
INSURANCE	3146	\$4,510.11

Payroll Total	1	13	3,	2	?7	Ę	i.	7	4	1
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<u>VD</u>	VENDOR	ACCT#	<u>AMOUNT</u>
344151	STANS OFFICE MACHINES	413000	\$265.00
380133	METRO INFECTIOUS DISEASE CONSULTANTS	424800	\$500.00
AA959-201902-0	ACL LABORATORIES	444140	\$36.17
T1139314	OXFORD DIAGNOSTIC LABORATORIES	444140	\$50.91
T1128044	OXFORD DIAGNOSTIC LABORATORIES	444140	\$50.91
2866	.WALMART	508500	\$11.94
3124	WALMART	508500	\$11.94
2867	WALMART	508500	\$11.94
190915	R&S NORTHEAST	508500	\$0.04
190150	R&S NORTHEAST	508500	\$0.20
190713	R&S NORTHEAST	508500	\$0.16
4180	WALMART	508500	\$11.94
4179	WALMART	508500	\$164.09
4173	WALMART	508500	\$375.63
5294	WALMART	508500	\$117.46

Total Expenses \$1,608.33

Grand Total \$14,884.07

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\$1,472.31 \$1,815.07 \$1,620.32
\$2,326.22
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\$1,771.05 \$1,182.49 \$1,188.50 \$1,182.17 \$1,187.51
\$2,384.58 \$1,542.65 \$1,550.48 \$1,542.22 \$1,549.18
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\$199.00 \$899.97 \$1,040.04 \$5,614.46 \$339.84
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\$59,92 \$136,46 \$102,46 \$138,98
\$6.40
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\$0.60 \$986.38 \$897.44 \$816.48 \$349.46
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344,148.47 344,740,33 344,720,41

\$27,487.68	\$22,741.49	\$22,920.35	\$27,316,47	\$21,656.94	\$24,744.20	\$31,163.23	\$37,236.10	\$21,674.87	\$22,788.84	\$4,327.22	22 \$33,795.83	\$297,853.22	
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\$4,144.42 58.6%

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(\$31,085.19)		\$322,559,48
(\$981.01) (\$31,08		\$337,541.31
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\$51,57		\$360,588.943
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BALANCE	REMAINING	\$ 250,000.00	\$ 5,376,90			4		\$ 82,502.00	\$ 342,231.47		\$135,223.78	\$16,474.87	\$10,442.00	\$0.00	\$1,363.00	\$13,176.54	\$15,926.98	\$21,436.30	\$214,043,47	\$21,150.00	\$150.00	\$500.00	\$0.00	\$150.00	\$462.10	\$0.00	\$1,301.00	. \$0.00	\$29,132,00	\$0.00	\$853,65	00.000	\$54,248.75	\$500.00	\$0.00	\$50.00	\$2,286.24	\$1,394.34	\$1,500.00	\$2,568.79	\$9,466.39	\$0.00	\$0,00	(\$15.01)	\$0.00	00.04	\$17,750.75		\$286,042,97
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TUBERCULOSIS CARE AND TREATMENT FY2019

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MONTHLY REPORT

MCDH Nurse Report

March 2019

Skin Testing:

- In January 14 clinics were held with 89 skin tests performed and 2 IGRA collected.
- In February 15 clinics were held with 32 skin test performed and 3 IGRAs collected.

Doctor Clinic:

- On January 14, 2019 doctor's clinic was held with 8 chest x rays reviewed and 17 charts reviewed.
- No February doctor's clinic was held.
- On March 11, 2019 doctor's clinic was held with 10 chest x rays reviewed and 14 charts reviewed.

Patient Update:

- -Patient A: is in the continuation phase of TB therapy projected to be done in July.
- -Patient B: was in continuation phase of TB therapy, completed February 11, 2019.

Activities:

-2/26/19 Five TSTs administered and 3/1/19 Four TSTs read.

Webinars/Trainings:

- Ongoing Case Management Course through Southeastern National Tuberculosis Center
- March 6, 2019- IGRA interpretation and New Tests webinar viewed

Upcoming events:

-PADS TST testing

MCDH Nurse Report

May 2019

Skin Testing:

- In January 14 clinics were held with 89 skin tests performed and 2 IGRA collected.
- In February 15 clinics were held with 32 skin test performed and 3 IGRAs collected.
- -In March clinics were held with 54 skin test performed and 1 IGRAs collected.
- -In April clinics were held with 44 skin test performed and 1 IGRAs collected.

Doctor Clinic:

- On January 14, 2019 doctor's clinic was held with 8 chest x rays reviewed and 17 charts reviewed.
- No February doctor's clinic was held.
- On March 11, 2019 doctor's clinic was held with 10 chest x rays reviewed and 14 charts reviewed.
- -On April 8, 2019 doctor's clinic was held with 7 chest x rays reviewed and 3 charts reviewed.

Patient Update:

- -Patient A: is in the continuation phase of TB therapy projected to be done in July, patient has therapy extended related to indeterminate PZA resistance.
- -Patient B: was in continuation phase of TB therapy, completed February 11, 2019.
- -LTBI: 3 out 4 patients successfully complete 3HP treatment. We have one more currently on their way to success.

Activities:

PADS: 2/26/19 Five TSTs administered and 3/1/19 Four TSTs read

PADS: 4/16/19 Three TSTs administered and 4/18/19 Two TSTs read

Webinars/Trainings:

- March 6, 2019- IGRA interpretation and New Tests webinar viewed
- Amanda completed Case Management Course through Southeastern National Tuberculosis Center April 2019

Upcoming events:

- -Treat more on LTBI with 3HP for better patient care and completion.
- -PADS testing in May

Tuberculosis Screening, Testing, and Treatment of U.S. Health Care Personnel: Recommendations from the National Tuberculosis Controllers Association and CDC, 2019

Lynn E. Sosa, MD^{1,2}; Gibril J. Njie, MPH³; Mark N. Lobato, MD²; Sapna Bamrah Morris, MD³; William Buchta, MD^{4,5}; Megan L. Casey, MPH⁶; Neela D. Goswami, MD³; MaryAnn Gruden, MSN⁷; Bobbi Jo Hurst⁷; Amera R. Khan, MPH³; David T. Kuhar, MD⁸; David M. Lewinsohn, MD, PhD⁹; Trini A. Mathew, MD¹⁰; Gerald H. Mazurek, MD³; Randall Reves, MD^{2,11}; Lisa Paulos, MPH^{2,12}; Wendy Thanassi, MD^{2,13}; Lorna Will, MA²; Robert Belknap, MD^{2,11}

The 2005 CDC guidelines for preventing Mycobacterium tuberculosis transmission in health care settings include recommendations for baseline tuberculosis (TB) screening of all U.S. health care personnel and annual testing for health care personnel working in medium-risk settings or settings with potential for ongoing transmission (1). Using evidence from a systematic review conducted by a National Tuberculosis Controllers Association (NTCA)-CDC work group, and following methods adapted from the Guide to Community Preventive Services (2,3), the 2005 CDC recommendations for testing U.S. health care personnel have been updated and now include 1) TB screening with an individual risk assessment and symptom evaluation at baseline (preplacement); 2) TB testing with an interferon-gamma release assay (IGRA) or a tuberculin skin test (TST) for persons without documented prior TB disease or latent TB infection (LTBI); 3) no routine serial TB testing at any interval after baseline in the absence of a known exposure or ongoing transmission; 4) encouragement of treatment for all health care personnel with untreated LTBI, unless treatment is contraindicated; 5) annual symptom screening for health care personnel with untreated LTBI; and 6) annual TB education of all health care personnel.

Background

Historically, U.S. health care personnel were at increased risk for LTBI and TB disease from occupational exposures; however, recent data suggest that this might no longer be the case. TB rates in the United States have declined substantially; the annual national TB rate in 2017 (2.8 per 100,000 population) represents a 73% decrease from the rate in 1991 (10.4) and a 42% decrease from the rate in 2005 (4.8) (4,5). Surveillance data reported to CDC during 1995-2007 revealed that TB incidence rates among health care personnel were similar to those in the general population (6), raising questions about the cost-effectiveness of routine serial occupational testing (7). In addition, a recent retrospective cohort study of approximately 40,000 health care personnel at a tertiary U.S. medical center in a low TB-incidence state found an extremely low rate of TST conversion (0.3%) during 1998-2014, with a limited proportion attributable to occupational exposure (8). Moreover, IGRAs and TSTs have well-documented limitations for serial testing of health care personnel at low risk for LTBI and TB disease (9,10).

Methods

In 2015, an NTCA-CDC work group comprising experts in TB, infection control, and occupational health was formed to discuss potential updates to recommendations for health care personnel TB screening and testing. The work group included representation from CDC, state and local public health departments, academia, and occupational health associations. During 2015–2016, the work group met periodically to discuss where updates were needed to the 2005 CDC recommendations and to establish a plan for the review of evidence. In January 2017, the work group commenced a systematic literature review of the screening and testing of health care personnel for TB and discussed the findings during a web conference in September 2017. Updated recommendations were developed by the work group during a web conference in December 2017.

Systematic review methods and findings. A systematic review of evidence published after release of the 2005 guidelines was conducted using methodology developed for the Guide to Community Preventive Services (2,3). The search included articles indexed in MEDLINE, EMBASE, and Scopus. The medical subject headings used for the search were "latent tuberculosis" and "tuberculosis"; search terms included "healthcare worker," "healthcare personnel," "health worker," "occupational exposure," and "occupational diseases." English language articles were included that 1) were published during January 2006-November 2017; 2) described TB screening and testing in low-incidence (11), high-income countries (12); 3) employed study designs that were randomized controlled trials, prospective cohort, retrospective cohort, or cross-sectional studies; and 4) reported LTBI prevalence, test conversion or reversion, or TB transmission rates. Each study was independently abstracted and assessed for suitability of study design by two reviewers using a data abstraction form adapted from the Guide to Community Preventive Services (3).

This search identified 1,147 citations, of which 39 studies focused on TB screening and testing among health care personnel; three studies (one that was an economic evaluation, one that focused only on test performance, and one of limited

TABLE. Comparison of 2005* and 2019[†] recommendations for tuberculosis (TB) screening and testing of U.S. health care personnel (HCP)

Category	2005 Recommendation	2019 Recommendation
Baseline (preplacement) screening and testing	TB screening of all HCP, including a symptom evaluation and test (IGRA or TST) for those without documented prior TB disease or LTBI.	TB screening of all HCP, including a symptom evaluation and test (IGRA or TST) for those without documented prior TB disease or LTBI (unchanged); individual TB risk assessment (new).
Postexposure screening and testing	Symptom evaluation for all HCP when an exposure is recognized. For HCP with a baseline negative TB test and no prior TB disease or LTBI, perform a test (IGRA or TST) when the exposure is identified. If that test is negative, do another test 8–10 weeks after the last exposure.	Symptom evaluation for all HCP when an exposure is recognized. For HCP with a baseline negative TB test and no prior TB disease or LTBI, perform a test (IGRA or TST) when the exposure is identified. If that test is negative, do another test 8–10 weeks after the last exposure (unchanged).
Serial screening and testing for HCP without LTBI	According to health care facility and setting risk assessment. Not recommended for HCP working in low-risk health care settings. Recommended for HCP working in medium-risk health care settings and settings with potential ongoing transmission.	Not routinely recommended (new); can consider for selected HCP groups (unchanged); recommend annual TB education for all HCP (unchanged), including information about TB exposure risks for all HCP (new emphasis).
Evaluation and treatment of positive test results	Referral to determine whether LTBI treatment is indicated.	Treatment is encouraged for all HCP with untreated LTBI, unless medically contraindicated (new).

Abbreviations: IGRA = interferon-gamma release assay; LTBI = latent tuberculosis infection; TST = tuberculin skin test.

Postexposure screening and testing. After known exposure to a person with potentially infectious TB disease without use of adequate personal protection, health care personnel should have a timely symptom evaluation and additional testing, if indicated. Those without documented evidence of prior LTBI or TB disease should have an IGRA or a TST performed. Health care personnel with documented prior LTBI or TB disease do not need another test for infection after exposure. These persons should have further evaluation if a concern for TB disease exists. Those with an initial negative test should be retested 8–10 weeks after the last exposure, preferably by using the same test type as was used for the prior negative test.

Serial screening and testing for health care personnel without LTBI. In the absence of known exposure or evidence of ongoing TB transmission, U.S. health care personnel (as identified in the 2005 guidelines) without LTBI should not undergo routine serial TB screening or testing at any interval after baseline (e.g., annually). Health care facilities might consider using serial TB screening of certain groups who might be at increased occupational risk for TB exposure (e.g., pulmonologists or respiratory therapists) or in certain settings if transmission has occurred in the past (e.g., emergency departments). Such determinations should be individualized on the basis of factors that might include the number of patients with infectious pulmonary TB who are examined in these areas, whether delays in initiating airborne isolation occurred, or whether prior annual testing has revealed ongoing transmission. Consultation with the local or state health department is encouraged to assist in making these decisions.

Health care personnel might have risks for TB exposure that are not related to their work in the United States, or they might BOX. Indicators of risk* for tuberculosis (TB) at baseline health care personnel assessment[†]

Health care personnel should be considered to be at increased risk for TB if they answer "yes" to any of the following statements.

 Temporary or permanent residence (for ≥1 month) in a country with a high TB rate (i.e., any country other than Australia, Canada, New Zealand, the United States, and those in western or northern Europe)

Or

 Current or planned immunosuppression, including human immunodeficiency virus infection, receipt of an organ transplant, treatment with a TNF-alpha antagonist (e.g., infliximab, etanercept, or other), chronic steroids (equivalent of prednisone ≥15 mg/day for ≥1 month), or other immunosuppressive medication

Or

3. Close contact with someone who has had infectious TB disease since the last TB test

Abbreviation: TNF = tumor necrosis factor.

[†] Adapted from a tuberculosis risk assessment form developed by the California Department of Public Health. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/TBCB-CA-

TB-Risk-Assessment-and-Fact-Sheet.pdf.

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[†] All other aspects of the Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings, 2005 remain in effect, including facility risk assessments to help guide infection control policies and procedures.

^{*} Individual risk assessment information can be useful in interpreting TB test results. (Lewinsohn DM, Leonard MK, LoBue PA, et al. Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention clinical practice guidelines: diagnosis of tuberculosis in adults and children. Clin Infec Dis 2017;64:111–5). https://academic.oup.com/cid/article/64/2/111/2811357.

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EDUCATION

Presentations	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
# of Presentations	0	0											0	
# of Attendees	0	0											0	

TESTING

TB Test Statistics	Jan	Feb	Mar	Apr	May	Jun	الال	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
				MC	DH (A	nnex	B)							
# of Clinics	14	15		l	· ·								29	
# of IGRAs	2	3											5	
# of Skin Tests	89	32								,			121	
			1	PADS	/ Old	Fireh	ouse) ***	7.7		Ý		11 1	
# of Clinics	0	0					- 41.	1.			77		0	
# of IGRAs	0	0			1		- 1			100			0	
# of Skin Tests	0	- 5							· · · · · · · · · · · · · · · · · · ·	3.37			5	
		4	Con	tact Ir	vesti	gation	n Tes	sting						
# of Clinics	0	0											0	
# of IGRAs	0	.0											0	
# of Skin Tests	0	0											0	
				Other	Outre	ach	Sites	100		1.1.57	4,54%		Million Section	
# of Clinics	0	0						V 10.	1,114		14.15		0	
# of IGRAs	0	0			٠.		17.7		7 7				0	
# of Skin Tests	0	1							100				1	
			<u> </u>		Tota	als			ł	·				
Total Skin Tests	89	38											127	
Total IGRAs	2	3											. 5	
Total Positive Tests	0	0											0	
County Positive Skin Test Rate*	0.0	0.0								<u> </u>			0.0	

[†] Past 1-year year-to-date (YTD) used as reference

^{*}Annual Rate YTD represents the annual rate per 100,000 population based on the US Census Bureau, 2013-2017 ACS 5-year Estimates for McHenry County (308,043 people)

Diagnostic Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
X-Rays Ordered	1	5											6	
Sputum Collected	0	8										,	8	
Laboratory Tests Ordered	1	3											4	

[†] Past 1-year year-to-date (YTD) used as reference

LTBI

Preventive Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
Positive clients transferred into county	0	0			,								0	
Positive Interviews	4	6											10	
Clients Starting LTBI	1	1							,				2	

[†] Past 5-year year-to-date (YTD) median used for calculation of reference value

Clients Starting LTBI	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
			•	•	Gen			•						
Male	0	0					Ī						0	-
Female	1	1	-										2	
				1 1 2	Ag	е	1.3			4.35	17.5.			
Children (0-18 years)	0.	0		25.30				1584			instă,	14 14	Ö	
Adult (19-64 years)	1	1					. '	1111		1,117	11111		2	
Senior Adult (65+ years)	0	0							11/1/1				0	电弧 作为证据的
				F	oreigr	Bor	ก		***************************************					
Yes	0	0		1			j						0	
No	1	1					T						2	

[†] Past 1-year year-to-date (YTD) used as reference

Treatment Completion	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
Clients Completing LTBI	1	1											2	
Failure to Complete	0	0											0	
Moved	0	0											0	
Lost to F/U	0	0						·					0 -	
Declined- Personal	0	0											0	
Declined-Medical	0	0											0	
Deceased	0	0											0	
Other	0	0											0	

[†] Past 1-year year-to-date (YTD) used as reference

ACTIVE TB

Active TB Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
# TB Cases Identified	0	0			***************************************								0	
County TB rate*	0	0											0	-
Active Cases Transferred OUT of County	0	0											0	
Active Cases Transferred INTO County	0	0											. 0	
Total Active TB Caseload**	0	0											0	
# DOT Visits	36	26											62	
# Video DOT Visits	0	0											0	
# TB Contact Investigations Initiated	0	0				·							0	
# Suspected Cases	0	2											2	

[†] Past 1-year year-to-date (YTD) used as reference for all values except for #TB Cases Identified (past 5-year YTD median used as reference for this statistic)

^{**}Number does not accumulate, it reflects the number of people for whom the DOT visits and DOT time account

Treatment Completion	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
Cases Completing Active TB Medication	0	0											0	
Failure to Complete	0	0											0	
Moved .	0	0			,								0	
Lost to F/U	0	0											0	
Declined- Personal	0	0											0	
Declined-Medical	0	0											0	
Deceased ·	0	0											0	
Óther	0	0											0	

[†] Past 1-year year-to-date (YTD) used as reference

Resistance Classifications	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
#MDR Cases Identified	0	0											0	
#XDR Cases Identified	0	0											0	

Active TB Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total 'YTD	YTD Reference †
			Locat	ion o	Activ	re TB	lden	itified						
Pulmonary	0	0.											0	
Extrapulmonary	0	О										`	0	
		; ·			Gen	der		1754		444.0				Franks.
Male	0	. 0											0	
Female	0	0				ı,		3500				1744	0	
					Ag	e		··············						·
Children (0-18 years)	. 0	0											0	
Adult (19-64 years)	0	0 -											· 0	
Senior Adult (65+ years)	0	0											0	
				F	oreign	Bor	1					4 7 7 7		HILL YEARS
Yes	0	0							11.75		Γ		0	
No	0	. 0		1.00					1, 41				0	

[†] Past 1-year year-to-date (YTD) used as reference

^{*}Annual Rate YTD represents the annual rate per 100,000 population based on the US Census Bureau, 2013-2017 ACS 5-year Estimates for McHenry County (308,043 people)

EDUCATION

Presentations	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
# of Presentations	0	0	0	0									0	1
# of Attendees	0	0	0	0		Γ							0	10

[†] Past 1-year year-to-date (YTD) used as reference

TESTING

TB Test Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference t
	1			MC	DH (A	nnex	B)		يسجيدين					
# of Clinics	14	15	17	20									66	62
# of IGRAs	2	3	1	1									7	1
# of Skin Tests	89	32	54	44									219	388
		1,1	F	PADS	/ Old	Fireh	ouse) [1] (1)	4114	3 1000				
# of Clinics	0	0	0	0			#11 ⁷³			200	134		0	14
# of IGRAs	0	0	0	0		1.14					100	74.5	. 0	-
# of Skin Tests	0	5	0	. 3	1 3 7 4 4	10.00		111.5	3.54	J. 1983	1 11 1	1.3	8	54
·			Cont	act Ir	vesti	gatio	ı Tes	sting						
# of Clinics	0	0	0	0									0	0
# of IGRAs	0	0	1	0									1	•
# of Skin Tests	0	0	7	0									7	0
	111	1.000	7.335	Other	Outre	ach	Sites		33.050	2,850	45. TY.	200		
# of Clinics	0	0	0	0	TO VIE	43,595	1000	Printh.	Haji	M,V	1 150.0	14.5	0	1274 H <u>=</u> 117
# of IGRAs	0	0	0	0	1 11 11	1	100	esti.	- Contra	150	1111		0	
# of Skin Tests	0	1	0	0	1		111	10.00			11.47		1	-
					Tota	als					•	***************************************		
Total Skin Tests	89	38	54	47									228	442
Total IGRAs	2	3	1	1									7	_
Total Positive Tests	0	0	1	0									1	11
County Positive Skin Test Rate*	0.0	0.0	0.3	0.0									0.3	*

[†] Past 1-year year-to-date (YTD) used as reference

^{*}Annual Rate YTD represents the annual rate per 100,000 population based on the US Census Bureau, 2013-2017 ACS 5-year Estimates for McHenry County (308,043 people)

Diagnostic Statistics	Jan	Feb	Mar	Арг	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference t
X-Rays Ordered	1	5	4	2									12	23
Sputum Collected	0	8	1	0									9	10
Laboratory Tests Ordered	1	3	1	4									9	11

[†] Past 1-year year-to-date (YTD) used as reference

LTBI

Preventive Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
Positive clients transferred into county	0	0	0	0									0	0
Positive Interviews	5	6	8	5									24	22
Clients Starting LTBI	1	1	1	4									7	8
+ Deat Francisco de deta (VTD) - di-								••••						**************************************

[†] Past 5-year year-to-date (YTD) median used for calculation of reference value

Clients Starting LTBI	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual YT	Total D	YTD Reference †
					Gen										
Male	0	0	0	1									1		4
Female	1	1	1	3									6		4
	94.7		1 - 1 - 1		Ag	е	11111	1,5 100	4.00		\$1.5%	1447			
Children (0-18 years)	0	0	0	0	11 12 13	1.44		1		1 14 11 44	175.1	44.77	0	15.77	0
Adult (19-64 years)	1	1	1	4	3 F F	34.57	47.5	44.5	2 T T	3.0			7	144.1	7
Senior Adult (65+ years)	0	0	0	0						100	7.54		0		1
				F	огеigr	Bor	n								
Yes	0	0	0	2									2		5
No	1	1	1	2									5		3

[†] Past 1-year year-to-date (YTD) used as reference

Treatment Completion	Jan	Feb	Mar	Anr	Mav	Jun	Aua	Sen	Oct	Nov	Dec	Annual Total	
												YTD	Reference †
Clients Completing LTBI	1	2	2	2								7	5
Failure to Complete	0	0	0	0								0	3 .
Moved	0	0	0	0								0	0
Lost to F/U	0	0	0	0	T							0	1
Declined- Personal	0	0	0	0								0	0
Declined-Medical	0	0	0	0		Ī						0	0
Deceased	0	0	0	0								0	0
Other	0	0	0	0								0	2

[†] Past 1-year year-to-date (YTD) used as reference

ACTIVE TB

Active TB Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
# TB Cases Identified	0	0	1	0									1	0
# Incident TB Cases for McHenry County	0	0	0	0									0	Ó
County TB rate*	0	0	0	0									0	-
Active Cases Transferred OUT of County	0	0	0	1									1	0
Active Cases Transferred INTO County	0	0	0	0									0	0
Total Active TB Caseload**	2	2	2	1									3	0
# DOT Visits	36	26	28	23									113	38
# Video DOT Visits	0	0	0	0									0	
# TB Contact Investigations Initiated	0	0	1	0									1	1
# Suspected Cases	0	2	0	0									2	4

[†] Past 1-year year-to-date (YTD) used as reference for all values except for # TB Cases Identified (past 5-year YTD median used as reference for this statistic)

^{**}Number does not accumulate, it reflects the number of people for whom the DOT visits and DOT time account

		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
Cases Completing Active TB Medication	0	1	0	0									1	0
Failure to Complete	0	0	0	0									0	0
Moved	0	0	0	0									0	0
Lost to F/U	0	0	0	0									0	0
Declined- Personal	0	0	0	0									0	0
Declined-Medical	0	0	0	0									0	0
Deceased	0	0	0	0									0	0
Other	0	0	0	0									0	0

[†] Past 1-year year-to-date (YTD) used as reference

Resistance Classifications	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
#MDR Cases Identified	0	0	0	0									0	Ó
#XDR Cases Identified	0	0	0	0									0	0

[†] Past 1-year year-to-date (YTD) used as reference

Active TB Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total YTD	YTD Reference †
			Locat	ion o	f Activ	ve TB	lder	ntified						
Pulmonary	0	0	1	0									1	1
Extrapulmonary	0	0	0	0									0	0
	William .	5 100	75.57	ianja:	Gen	der	, 11 L	10, 1000	1177.11		7 1 7 2	1 150		
Male	0	0	0	0	17. V t	34.5	.416.	THE S		1 11 11			0	100
Female	0	0	1	0	1 4 7 1	1.0		1	1		-1 1		1	0
			***************************************		Ag	e								
Children (0-18 years)	0	0	1	0									1	0
Adult (19-64 years)	0	0	0	0					T				0	0
Senior Adult (65+ years)	0	0	0	0					T				0	0
	1994	14		F	oreigi	ı Bor	n	18 834	Nagy :					Martinesi, s
Yes	-0	0	0	0	1.5	14.75	2.5	Append	1 1 1 1		186	100	0	1
No	0	0	1	0	T		7 7		1111	-3.4%	437	77:47	1	0

^{*}Annual Rate YTD represents the annual rate per 100,000 population based on the US Census Bureau, 2013-2017 ACS 5-year Estimates for McHenry County (308,043 people)

I. Numbers of Cases

These are preliminary numbers, but for 2018, there were a total of 319 cases of active TB reported, which is 18 cases less than in 2017!

For 2019, there are 29 cases reported and confirmed. Compared to the same week last year, there were 19 cases reported.

	2018	totals	2019 to date
DuPage County	50	(↑8)	3
Kane County	9	(↓7)	3
Kendall	2	(↓1)	0
Lake County	19	(18)	0
McHenry	2	(↑2)	0
Will County	6	(↓4)	0
Winnebago	1	(↓2)	1
Suburban Cook	84	(↓1)	8
Chicago	115	(↓13)	14

II. Drug Resistance

Of the 319 cases reported in 2018, 216 were culture positive. Of those culture positive, 199 (92.1%) have their susceptibilities reported.

18 (9.1%) cases are resistant to Isoniazid.

2 (1.0%) cases are Multi-Drug Resistant (resistant to both Isoniazid and Rifampin).

III. Dead at Diagnosis or Died on Therapy

Of the 319 cases reported thus far, 4 were dead at diagnosis and 31 died during therapy. 10 were noted: cause of death was TB.

IV. US born vs Foreign Born

Of the 319 cases reported, 78 cases are US born (24.5%)

241 cases are Foreign Born (75.5%)

- V. Education Opportunities
- TB related webinars in March 2019, being offered by IDPH: March 6- IGRA interpretation and New Tests- Dr Layden March 13- Pediatric TB

March 27- Civil Surgeon Technical Instructions- Dr Regan

2. World TB Day will be celebrated on March 19 from 9am-1pm at UIC School of Nursing in Chicago and March 20 from 8am-1:30pm at Carle Forum in Urbana.

For information on the Chicago event, email Kathy Ritger at Kathleen.ritger@cityofchicago.org

For information on the Urbana event, email Jennifer Chacon at jennifer.chacon@illinois.gov

I. Numbers of Cases

There are 66 cases reported and confirmed so far in 2019. Compared to the same week last year, there were 67 cases reported.

2019 to	<u>date</u>

Boone County 2

DuPage County 7

Kane County 6

Kendall 0

Lake County 2

McHenry 0

Will County 5

Winnebago 1

Suburban Cook 13

Chicago 26

II. Drug Resistance

Of the 66 cases reported thus far in 2019, 39 were culture positive. Of those culture positive, 19 (48.7%) have their susceptibilities reported.

1 (5.3%) case is resistant to Isoniazid.

1 (5.3%) case is Multi-Drug Resistant (resistant to both Isoniazid and Rifampin).

III. Dead at Diagnosis or Died on Therapy

Of the 66 cases reported thus far, 2 were dead at diagnosis and 4 died during therapy. 1 has documentation that cause of death was related to TB.

IV. US born vs Foreign Born

Of the 66 cases reported, 16 cases are US born (24%)

50 cases are Foreign Born (76%)

V. Education Opportunities

- AiCure sign up in Schaumburg on May 14. Come learn about video DOT and sign up for free service for DOT for TB clients. Contact Elaine to sign up.
- 2. TB 101 course for nurses new to TB care. June 5 and 6 in Springfield. Contact Jennifer to sign up.
- 3. TB in the Correctional Setting. July 16 in Springfield and July 18 in Carterville. Contact Jennifer to sign up.
- 4. Illinois Council on TB (ICOT) Conference. August 29 in Springfield. Watch mail for brochure or contact Elaine. There is a fee for this conference.
- 5. Northern Illinois TB Control Authorities (NITCA) meeting. November 14 at DuPage County Health Department. Contact Elaine.
- 6. Southern Illinois TB Control Authorities (SITCA) meeting. November 20 in Carterville. Contact Jennifer.
- 7. TB 101 course for nurses new to TB care. December 4 and 5 in Springfield. Contact Jennifer.
- Central Illinois TB Control Authorities (CITCA) meeting. December
 at McLean County Health Department in Bloomington. Contact Jennifer.

Elaine.darnall@illinois.gov jennifer.chacon@illinois.gov

PROGRAM HIGHLIGHTS

OLD BUSINESS

NEW BUSINESS

BOARD ISSUES

INFORMATION

Tuberculosis — United States, 2018

Amish Talwar, MD; Clarisse A. Tsang, MPH; Sandy F. Price; Robert H. Pratt; William L. Walker, DVM, PhD; Kristine M. Schmit, MD; Adam J. Langer, DVM

Morbidity and Mortality Weekly Report. 2019;68(11):257-262.

Abstract and Introduction

Introduction

In 2018, a total of 9,029 new tuberculosis (TB) cases were reported in the United States, representing a 0.7% decrease from 2017.* The U.S. TB incidence in 2018 (2.8 per 100,000 persons) represented a 1.3% decrease from 2017; the rate among non –U.S.-born persons was >14 times that in U.S.-born persons. This report summarizes provisional TB surveillance data reported to CDC's National Tuberculosis Surveillance System (NTSS) through 2018. Although the total number of cases and incidence are the lowest ever reported in the United States, a recent model predicted that the U.S. TB elimination goal (annual incidence of <1 case per 1 million persons) will not be attained in the 21st century without greatly increased investment in detection and treatment of latent TB infection (LTBI). Programs to identify, test, and treat populations at high risk for TB remain important to eliminating TB in the United States.

Health departments in the 50 states and District of Columbia (DC) electronically report provisional case data that meet the national TB surveillance case definition to CDC. Data reported include demographic information (e.g., birth date, sex, self-reported race/ethnicity, and country of birth), clinical information (e.g., reason for TB evaluation, anatomic site of disease, test results, and therapy administered), and information on TB risk factors (e.g., human immunodeficiency virus [HIV] infection status, history of homelessness, and residence in a congregate setting). According to U.S. Census Bureau definitions, a "U.S.-born" person is classified as one born in the United States or a U.S. territory or born abroad to a U.S. citizen parent. Race/ethnicity data are collected and reported using federal classification standards; Hispanics/Latinos can be of any race, and all other reported race categories are non-Hispanic/Latino. CDC derived the denominators used to calculate national and state TB incidence from July 2018 U.S. Census Bureau population estimates^[2] and the denominators used to calculate TB incidence by national origin and race/ethnicity from July 2018 Current Population Survey data. The number of reported TB cases and TB incidence (cases per 100,000 persons) for 2017 and 2018, as well as the percent changes from 2017 to 2018, were calculated for the 50 states and DC and for each U.S. Census Bureau division. The numbers of TB cases and TB incidence per 100,000 persons were calculated by national origin and race/ethnicity for 2015–2018.

TB incidence declined 1.3% from 2017 to 2018 and an average of 1.6% per year during the last 4 years (2014–2018), a slower pace of decline than the 4.7% annual decline during 2010–2014. State-specific TB incidence for 2018 ranged from 0.2 per 100,000 in Wyoming to 8.5 in Alaska, with a median rate of 1.9 (). Ten states (Alaska, California, Florida, Hawaii, Maryland, Massachusetts, Minnesota, New Jersey, New York, and Texas) and DC reported TB incidence above the national rate. As has been the case for over 2 decades, four states (California, Florida, New York, and Texas) accounted for approximately half of the reported cases of TB in the United States.

Table 1. Tuberculosis (TB) case counts and incidence with annual percent changes, by U.S. Census division and state/district — 50 states and the District of Columbia, 2017 and 2018

100000000000000000000000000000000000000	No. of	reporte	d TB cases*	٦	ß incl	dence [†]
Census division/State	2017	2018	% Change	2017	2018	% Change§
Division 1: New Engla	and					
Connecticut	63	51	-19.0	1.8	1.4	-19.0
Maine	14	14	0.0	1.0	1.0	- 0.2
Massachusetts	209	200	-4.3	3.0	2.9	-4.8
New Hampshire	19	12	-36.8	1.4	0.9	-37.2
Rhode Island	13	20	53.8	1.2	1.9	53.7
Vermont	3	5	66.7	0.5	8.0	66.2
Total	321	302	-5.9	2.2	2.0	-6.2
Division 2: Middle Atl	antic					
New Jersey	283	290	2.5	3.2	3.3	2.2
New York	800	750	-6.3	4.1	3.8	-6,0

Pennsylvania	192	212	10.4	1.5	1.7	10.3
Total	1,275	1,252	-1.8	3.1	3.0	-1.8
Division 3: East Nort	n Centra	ıl				
Illinois	335	319	-4.8	2.6	2.5	-4.4
Indiana	100	116	16.0	1.5	1.7	15,4
Michigan	133	109	-18.0	1.3	1.1	-18.2
Ohio	149	178	19.5	1.3	1.5	19.2
Wisconsin	49	49	0.0	0.8	8.0	-0.4
Total	766	771	0.7	1.6	1.6	0.5
Division 4: West Nor	h Centr	al				
lowa	47	49	4.3	1.5	1.6	3.8
Kansas .	29	28	-3.4	1.0	1.0	-3.5
Minnesota	178	172	-3.4	3.2	3.1	-4.1
Missouri	87	82	-5.7	1.4	1.3	-6.0
Nebraska	21	27	28.6	1.1.	1.4	27.8
North Dakota	14	13	-7.1	1.9	1.7	-7.7
South Dakota	14	12	-14,3	1.6	1.4	-15.2
Total	390	383	-1.8	1.8	1.8	-2.3
Division 5: South Atl	antic	1	<u>,</u>		<u> </u>	.H
Delaware	15	22	46.7	1.6	2.3	45.1
District of Columbia	36	36	0.0	5.2	5.1	-1.0
Florida	549	591	7.7	2.6	2.8	6.0
Georgia	293	273	-6.8	2.8	2.6	-7.8
Maryland	207	207	0.0	3.4	3.4	-0.3
North Carolina	213	196	-8.0	2.1	1.9	-9.0
South Carolina	101	86	-14.9	2.0	1.7	-15.9
Virginia	204	205	0.5	2.4	2.4	-0.1
West Virginia	16	7	-56.3	0.9	0.4	-56.0
Total	1,634	1,623	-0.7	2.5	2.5	-1.7
Division 6: East Sou	<u> </u>	l	И		<u> </u>	-JI
Alabama	120	91	-24.2	2.5	1.9	-24.4
Kentucky	65	65	0.0	1.5	1.5	-0.3
Mississippi	52	80	53.8	1.7	2.7	54.0
Tennessee	127	140	10.2	1.9	2.1	9.2
Total	364	376	3.3	1.9	2.0	2.8
Division 7: West Sou	<u> </u>	11][<u> </u>	il
Arkansas	85	79	-7.1	2.8	2.6	-7.4
Louisiana	141	105	-25.5	3.0	2.3	-25.4
Oklahoma	54	74	37.0	1.4	1.9	36.7
Texas	1,127	<u> </u>	<u> </u>	4.0	3.9	-1.1
Total	1,407		(j———	3.5	3.4	-2.4
Division 8: Mountain		1,007	1		JU. T	
Division 6. Mountani						

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Arizona	188	178	-5.3	2.7	2.5	-6.9		
Colorado	84	64	-23.8	1.5	1.1	~24.9		
ldaho	10	15	50.0	0.6	0.9	47.0		
Montana	3	5	66.7	0.3	0.5	65.2		
Nevada	80	69	-13.8	2.7	2.3	-15.5		
New Mexico	37	41	10.8	1.8	2.0	10.7		
Utah	29	18	-37.9	0.9	0.6	-39.1		
Wyoming	2	1	-50.0	0.3	0.2	-49.9		
Total	433	391	-9.7	1.8	1.6	-11.1		
Division 9: Pacific								
Alaska	53	63	18.9	7.2	8.5	19.2		
California	2,059	2,091	1.6	5.2	5.3	1.1		
Hawaii	116	120	3.4	8.1	8.4	3.7		
Oregon	69	81	17.4	1.7	1.9	16.2		
Washington	207	189	-8.7	2.8	2.5	-10.0		
Total	2,504	2,544	1.6	4.7	4.8	1.0		
United States	9,094	9,029	-0.7	2.8	2.8	-1.3		

^{*}Case counts were based on data from the National Tuberculosis Surveillance System as of February 11, 2019.

†Cases per 100,000 persons. TB incidence was calculated using denominators from U.S. Census Bureau midyear population assimates.

Among the 9,029 TB cases reported in the United States in 2018, approximately two thirds (6,276 [69.5%]) occurred in non –U.S.-born persons, whereas 2,662 (29.5%) occurred in U.S.-born persons; 91 (1.0%) cases occurred in persons for whom no national origin was documented (). This distribution is similar to that in 2017, when 6,392 (70.3%) cases occurred in non–U.S.-born persons, 2,693 (29.6%) occurred in U.S.-born persons, and 9 (0.1%) occurred in persons for whom no national origin was documented. TB incidence among non–U.S.-born persons (14.2 cases per 100,000) decreased by 3.8% from 2017 to 2018, and the incidence among U.S.-born persons (1.0 cases per 100,000) decreased by 1.8% (Figure). If

Table 2. Newly diagnosed tuberculosis (TB) case counts and incidence,* by national origin and race/ethnicity — United States, 2015–2018[†]

	No. of cases (incidence)					
U.S. population group	2015	2016	2017	2018		
U.Sborn [§]						
Hispanic	660 (1.8)	603 (1.6)	591 (1.5)	582 (1.5)		
White, non-Hispanic	984 (0.5)	910 (0.5)	797 (0.4)	801 (0.4)		
Black, non-Hispanic	1,142 (3.3)	1,066 (3.0)	1,008 (2.9)	938 (2.6)		
Asian	138 (2.1)	146 (2.1)	134 (1.9)	139 (1.9)		
American Indian/Alaska Native	144 (7.0)	110 (5.1)	92 (3.8)	102 (4.0)		
Native Hawaiian/Pacific Islander	42 (6.1)	31 (4.3)	46 (6.7)	42 (5.6)		
Multiple or unknown race/Ethnicity	25 (— [¶])	23 (— [¶])	25 (— ¹)	58 ([¶])		
Total U.Sborn	3,135 (1.1)	2,889 (1.0)	2,693 (1.0)	2,662 (1.0)		
NonU.Sborn						
Hispanic	2,036 (10.4)	1,990 (10.1)	1,973 (10.0)	2,006 (10.1)		
White, non-Hispanic	258 (3.4)	286 (3.8)	268 (3.5)	251 (3.1)		
Black, non-Hispanic	858 (23.2)	914 (22.7)	901 (22.2)	829 (19.9)		
Asian	3,157 (29.7)	3,051 (27.2)	3,126 (27.3)	2,993 (25.4)		

estimates. §Percentage change in incidence was calculated using unrounded rate for 2017 and 2018.

American Indian/Alaska Native	1 (1.9)	1 (2.9)	2 (2.9)	3 (5.2)
Native Hawaiian/Pacific Islander	60 (18.6)	47 (13.0)	66 (22.4)	74 (25.0)
Multiple or unknown race/Ethnicity	37 (— [¶])	68 (— [¶])	56 (— [¶])	120 (— [¶])
Total non-U.Sborn	6,407 (15.3)	6,357 (14.7)	6,392 (14.7)	6,276 (14.2)
Unknown national origin	5 (—¶)	7 (— [¶])	9 (—¶)	91 (— [¶])
Overall total	9,547 (3.0)	9,253 (2.9)	9,094 (2.8)	9,029 (2.8)

^{*}Incidence was calculated as cases per 100,000 persons.

Case counts were based on data from the National Tuberculosis Surveillance System as of February 11, 2019. The Current Population Survey (https://www.census.gov/programs-surveys/cps.html) provides the population denominators used to calculate TB incidence according to national origin and racial/ethnic group.

§U.S.-born persons were born in the United States or U.S. territories (American Samoa, Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and U.S. Virgin Islands) or born elsewhere to a U.S. citizen. Non–U.S.-born persons were born outside the United States (or the U.S. territories), and include those born in the sovereign freely associated states (Federated States of Micronesia, Marshall Islands, and Palau) (unless one or both parents were U.S. citizens).

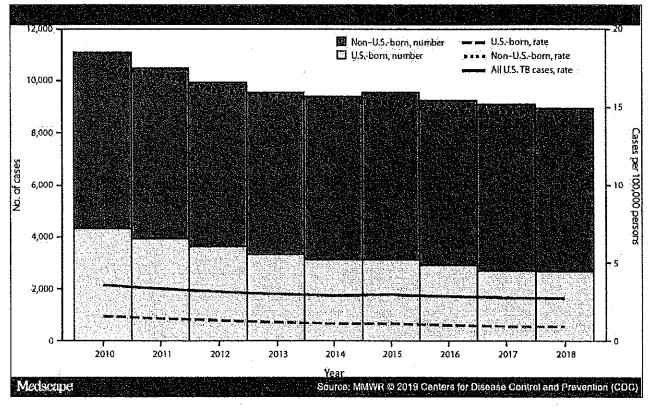


Figure.

Number of tuberculosis (TB) cases and TB incidence, by national origin*¹ — United States, 2010–2018

*Number of cases among non-U.S.-born and U.S.-born persons and associated incidence exclude cases with unknown country of origin. Incidence for all U.S. TB cases includes cases with unknown country of origin.

†Incidence for non–U.S.-born and U.S.-born persons calculated using population estimates from Current Population Survey. Incidence for all persons with TB diagnosed in the United States calculated using population estimates from U.S. Census Bureau.

Among non–U.S.-born persons with TB, incidence in 2018 was highest among Asians, followed by Native Hawaiians/Pacific Islanders, non-Hispanic blacks (blacks), Hispanics, and American Indian/Alaska Natives, and was lowest among non-Hispanic whites (whites) (). Among TB cases in non–U.S.-born persons, incidence decreased from 2017 to 2018 among Asians, blacks, and whites, but increased in Hispanics. The top five countries of birth of non–U.S.-born persons with TB were Mexico (1,195 cases; 19.0% of all non–U.S.-born cases), Philippines (781; 12.4%), India (616; 9.8%), Vietnam (503; 8.0%), and China (374; 6.0%). Among TB cases in non–U.S.-born persons, 2,905 (46.3%) were diagnosed ≥10 years after the patient first arrived in the United States.

Table 2. Newly diagnosed tuberculosis (TB) case counts and incidence,* by national origin and race/ethnicity — United States, 2015–2018[†]

	No. of cases (incidence)					
U.S. population group	2015	2016	2017	2018		
U.Sborn [§]						
Hispanic	660 (1.8)	603 (1.6)	591 (1.5)	582 (1.5)		
White, non-Hispanic	984 (0.5)	910 (0.5)	797 (0.4)	801 (0.4)		
Black, non-Hispanic	1,142 (3.3)	1,066 (3.0)	1,008 (2.9)	938 (2.6)		
Asian	138 (2.1)	146 (2.1)	134 (1.9)	139 (1.9)		
American Indian/Alaska Native	144 (7.0)	110 (5.1)	92 (3.8)	102 (4.0)		
Native Hawaiian/Pacific Islander	42 (6.1)	31 (4.3)	46 (6.7)	42 (5.6)		
Multiple or unknown race/Ethnicity	25 (— [¶])	23 (— [¶])	25 (— ¹)	58 (— [¶])		
Total U.Sborn	3,135 (1.1)	2,889 (1.0)	2,693 (1.0)	2,662 (1.0)		
Non-U.Sborn						
Hispanic	2,036 (10.4)	1,990 (10.1)	1,973 (10.0)	2,006 (10.1)		
White, non-Hispanic	258 (3.4)	286 (3.8)	268 (3.5)	251 (3.1)		
Black, non-Hispanic	858 (23.2)	914 (22.7)	901 (22.2)	829 (19.9)		
Asian	3,157 (29.7)	3,051 (27.2)	3,126 (27.3)	2,993 (25.4)		
American Indian/Alaska Native	1 (1.9)	1 (2.9)	2 (2.9)	3 (5.2)		
Native Hawaiian/Pacific Islander	60 (18.6)	47 (13.0)	66 (22.4)	74 (25.0)		
Multiple or unknown race/Ethnicity	37 (— [¶])	68 (— ¹)	56 (— [¶])	120 (— [¶])		
Total non-U.Sborn	6,407 (15.3)	6,357 (14.7)	6,392 (14.7)	6,276 (14.2)		
Unknown national origin	5 (— ¹¹)	7 (— [¶])	9 (— [¶])	91 (— ¹)		
Overall total	9,547 (3.0)	9,253 (2.9)	9,094 (2.8)	9,029 (2.8)		

^{*}Incidence was calculated as cases per 100,000 persons.

[†]Case counts were based on data from the National Tuberculosis Surveillance System as of February 11, 2019. The Current Population Survey (https://www.census.gov/programs-surveys/cps.html) provides the population denominators used to calculate TB incidence according to national origin and racial/ethnic group.

§U.S.-born persons were born in the United States or U.S. territories (American Samoa, Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and U.S. Virgin Islands) or born elsewhere to a U.S. citizen. Non–U.S.-born persons were born outside the United States (or the U.S. territories), and include those born in the sovereign freely associated states (Federated States of Micronesia, Marshall Islands, and Palau) (unless one or both parents were U.S. citizens).

The highest TB incidence for U.S.-born persons occurred among Native Hawaiians/Pacific Islanders, followed by American Indians/Alaska Natives, blacks, Asians, and Hispanics, and was lowest in whites (). Among U.S.-born persons, TB incidence decreased from 2017 to 2018 among blacks, but remained stable among Asians, Hispanics, and whites.

Table 2. Newly diagnosed tuberculosis (TB) case counts and incidence,* by national origin and race/ethnicity — United States, 2015–2018[†]

	No. of cases (incidence)					
U.S. population group	2015	2016	2017	2018		
U.Sborn [§]						
Hispanic	660 (1.8)	603 (1.6)	591 (1.5)	582 (1.5)		
White, non-Hispanic	984 (0.5)	910 (0.5)	797 (0.4)	801 (0.4)		
Black, non-Hispanic	1,142 (3.3)	1,066 (3.0)	1,008 (2.9)	938 (2.6)		
Asian	138 (2.1)	146 (2.1)	134 (1.9)	139 (1.9)		
American Indian/Alaska Native	144 (7.0)	110 (5.1)	92 (3.8)	102 (4.0)		

Native Hawaiian/Pacific Islander	42 (6.1)	31 (4.3)	46 (6.7)	42 (5.6)		
Multiple or unknown race/Ethnicity	25 (— [¶])	23 (— [¶])	25 (— [¶])	58 (— ¹¹)		
Total U.Sborn	3,135 (1.1)	2,889 (1.0)	2,693 (1.0)	2,662 (1.0)		
Non-U.Sborn						
Hispanic	2,036 (10.4)	1,990 (10.1)	1,973 (10.0)	2,006 (10.1)		
White, non-Hispanic	258 (3.4)	286 (3.8)	268 (3.5)	251 (3.1)		
Black, non-Hispanic	858 (23.2)	914 (22.7)	901 (22.2)	829 (19.9)		
Asian	3,157 (29.7)	3,051 (27.2)	3,126 (27.3)	2,993 (25.4)		
American Indian/Alaska Native	1 (1.9)	1 (2.9)	2 (2.9)	3 (5.2)		
Native Hawaiian/Pacific Islander	60 (18.6)	47 (13.0)	66 (22.4)	74 (25.0)		
Multiple or unknown race/Ethnicity	37 (—¶)	68 (— [¶])	56 (—¶)	120 ([§])		
Total non-U.Sborn	6,407 (15.3)	6,357 (14.7)	6,392 (14.7)	6,276 (14.2)		
Unknown national origin	5 (1)	7 (— [¶])	9 (—¶)	91 (— [¶])		
Overall total	9,547 (3.0)	9,253 (2.9)	9,094 (2.8)	9,029 (2.8)		

^{*}Incidence was calculated as cases per 100,000 persons.

[†]Case counts were based on data from the National Tuberculosis Surveillance System as of February 11, 2019. The Current Population Survey (https://www.census.gov/programs-surveys/cps.ntml) provides the population denominators used to calculate TB incidence according to national origin and racial/ethnic group.

§U.S.-born persons were born in the United States or U.S. territories (American Samoa, Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and U.S. Virgin Islands) or born elsewhere to a U.S. citizen. Non-U.S.-born persons were born outside the United States (or the U.S. territories), and include those born in the sovereign freely associated states (Federated States of Micronesia, Marshall Islands, and Palau) (unless one or both parents were U.S. citizens). Incidence was not calculated for these categories.

During 2018, 4.1% of TB cases were reported among persons who experienced homelessness within the year preceding diagnosis, 3.3% among residents of a correctional facility at the time of diagnosis, and 1.6% among residents of a long-term care facility at the time of diagnosis.** Among cases diagnosed in persons who experienced homelessness and among residents of long-term care facilities, 60.8% and 56.8%, respectively, were in persons who were U.S.-born, whereas among residents of a correctional facility, only 33.6% were U.S.-born. HIV status was known for 85.3% of TB cases reported in 2018. Overall, 5.3% of TB patients with known HIV status were coinfected with HIV, including 8.6% among persons aged 25-44 years.

Initial drug-susceptibility testing for at least isoniazid and rifampin was performed for 73.5% of all TB cases (and 93.8% of culture-confirmed cases) in 2017, the most recent year for which complete data are available. The Among the 6,684 TB cases reported in 2017 with available drug-susceptibility testing results, 128 (1.9%) were multidrug-resistant TB. Of these multidrug-resistant TB. cases, 110 (85.9%) were in non–U.S.-born persons; 26 (20.3%) multidrug-resistant TB patients reported a previous episode of TB. Three cases of extensively drug-resistant TB^{fff} were reported, all of which occurred in non–U.S.-born persons.

- * This report is limited to National Tuberculosis Surveillance System provisional data as of February 11, 2019. Updated data will be available in CDC's annual TB surveillance report later this year.
- † https://www.cdc.gov/tb/programs/rvct/instructionmanual.pdf.
- These calculations are based on unrounded annual TB incidence rates.
- 1 The decrease in overall incidence does not fall within the range of decreases by national origin because, although the denominators used to calculate both rates increased from 2017 to 2018, the denominator used for rates by national origin (according to Current Population Survey data) increased by an additional 705,000 persons, compared with the denominator used to calculate the overall rate (according to U.S. Census Bureau data). This resulted in a larger calculated decrease in rate by national origin, compared with the overall rate.
- ** Percentages are calculated using cases with complete data for each of these three individual variables.
- th Because information on initial drug-susceptibility testing for isoniazid and rifampin is only available for 66.5% of all TB cases in 2018 (and 86.1% of culture-confirmed cases), more complete data from 2017 are presented instead. Culture-confirmed cases are defined as cases that were culture-positive on a specimen collected within 2 weeks of start of TB treatment.

 §§§ A case of TB caused by a strain of *Mycobacterium tuberculosis* that is resistant to at least isoniazid and rifampin.
- 1 A case of TB caused by a strain of Mycobacterium tuberculosis that is resistant to isoniazid and rifampin as well as any fluoroquinolone and at least one of three injectable second-line drugs (i.e., amikacin, kanamycin, or capreomycin).

Discussion

In 2018, the provisional TB case count and incidence for the United States declined slightly, compared with those in 2017. Lower counts and incidences were seen in U.S.-born persons as well as in non-U.S.-born persons, who continue to represent a large majority of TB cases and have an incidence >14 times that of U.S.-born persons.

In 2018, approximately half (46.3%) of TB cases in non–U.S.-born persons received a TB diagnosis ≥10 years after first arriving in the United States, consistent with a published estimate that reactivation of remotely acquired LTBI has been responsible for >80% of domestic TB cases. ^[4] Therefore, TB elimination will require a concerted effort to enhance surveillance, detection, and treatment for LTBI among populations at increased risk.

Between 3.1% and 5.0% of the U.S. population has LTBI. [5.6] Without treatment, 5%–10% of persons with LTBI will develop TB disease in their lifetime. [7] CDC and the U.S. Preventive Services Task Force recommend testing populations that are at increased risk for TB, including persons born in or who frequently travel to countries where TB is prevalent and persons who currently live, or previously lived, in congregate settings. CDC also recommends testing for TB in health care workers and others who work in places where there is a high risk of TB transmission, persons who are contacts of a person with infectious TB disease, and immunocompromised persons, who have a higher risk for developing TB disease once infected. [8] According to one model, increased uptake of LTBI screening and treatment among populations at higher risk for TB would result in an incidence of 26 new infections per million by 2050. [11] Detection of LTBI can be improved by the preferential use of interferon-y release assays over the tuberculin skin test, especially in persons with a history of Bacillus Calmette-Guérin vaccination or who are unlikely to return to have their tuberculin skin test read. [9] In addition, the adoption of shorter, safer, and more convenient LTBI treatment regimens continues to be critical in improving treatment initiation and completion. [10] Therefore, CDC recommends either 3 months of onceweekly rifapentine plus isoniazid or 4 months of daily rifampin for treatment of LTBI; these regimens may be used instead of longer courses of isoniazid alone. [10] Given that the estimated prevalence of LTBI is higher among non-U.S.-born persons should be prioritized. CDC is working with its state and local partners to develop an LTBI surveillance system to track effectiveness of public health measures to address LTBI.

The findings in this report are subject to at least two limitations. First, this analysis is limited to the reported provisional number of TB cases and incidence for 2018. Second, incidences are calculated using estimated population numbers as denominators.***

TB case counts and incidence in the United States in 2018 are the lowest ever reported, but this progress has slowed recently. To achieve TB elimination, the United States must expand detection and treatment of LTBI and TB disease. TB is a global problem, and its elimination will depend on cooperative measures to detect and treat LTBI and TB disease around the world.

*** The second and third references provide information on population estimates used to calculate denominators.

Sidebar

Summary

What is already known about this topic?

The number of tuberculosis (TB) cases and incidence in the United States have steadily declined since 1993.

What is added by this report?

U.S. TB incidence in 2018 (2.8 cases per 100,000 persons) was the lowest ever reported. Non-U.S.-born persons accounted for approximately two thirds of cases.

What are the implications for public health practice?

The current decline in TB incidence is insufficient to eliminate TB in the United States in the 21st century. TB elimination will require enhanced surveillance, detection, and treatment. Focusing on populations that are at increased risk for latent TB infection will be important in achieving TB elimination.

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